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ABSTRACT

This paper examines academic program, course enrollments, and extracurricular memberships in racially and ethnically integrated high schools with the aim of determining the extent of participation by black and white students within schools. The goal of the study was to ascertain whether students are resegregated in schools through these mechanisms. Data were obtained from 1,318 schools nationally as part of the National Longitudinal Survey (NLS) of the High School Class of 1972. Analysis of the data shows that: (1) white students in desegregated schools participate less in extracurricular and social activities than those in all white schools; (2) black students participate more in such desegregated activities as athletics, drama, and music, while whites are more active in honorary clubs; (3) blacks are less likely to enroll in academic or college preparatory programs in both segregated and desegregated schools; and (4) interracial contact is diminished in desegregated schools because of the use of tracking or ability grouping procedure. Alternative measures to promote student heterogeneity are proposed. Appended to the report are statistical tables. (Author/AOS)

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Contrasts, Trends and Implications of Student Course Enrollments and Extra Curricular Memberships in Desegregated High Schools

A Report to the
National Institute of Education,
United States Department of Education

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Abstract

This paper examines academic program enrollments, course enrollments, and extracurricular memberships in racially and ethnically mixed high schools in order to determine the extent of participation by black and white students. The major issue is whether, in desegregated schools, black and white students are resegregated through these mechanisms.

The study is based on data collected from 1318 schools throughout the nation for the National Longitudinal Survey (NLS) of the High School Class of 1972. The study finds that white students in desegregated schools participate less in extracurricular activities and clubs than do white students in segregated schools, and that black male students in desegregated schools participate more. Both black male and black female students participate more in desegregated schools in athletics, drama, and music activities, but white students participate more in honorary clubs.

For academic program and course enrollments, the study finds that black students are less likely than whites to be enrolled in academic or college preparatory programs in segregated and desegregated schools. In desegregated schools, however, blacks and whites are about equally likely to be enrolled in most courses, but the use of tracking or ability grouping procedures significantly reduces the opportunities for cross-race contact in those courses.

Executive Summary

American high schools enroll a racially and ethnically diverse student population. This examination of two national data sets on high school students, seniors from 1972 and sophomores in 1980, suggests that the potential for cross-race contact depends heavily on the structure of curricular and extracurricular activities in the schools, and that the benefits resulting from such participation are critical for students' self-perceptions, sense of efficacy and self-evaluations. Indeed, there is evidence that participation in school activities rivals in importance other schooling measures as well as non-school f.ctors.

These broad generalizations are based on the results summarized below.

Extracurricular opportunities and resegregation

1. The high participation rate of students in high school clubs and activities creates a major potential for cross-race contact.

2. Senior white students in 1972 participated less in activities in desegregated schools than in all-white schools, while black 1972 seniors participated more in desegregated schools than in all-black schools. Black 1980 sophomores participated more in segregated schools than in desegregated schools while the opposite is true for white sophomores in 1980.

3. In desegregated high schools, from either high school class, higher black participation rates are most striking for athletics and music or drama, and for seniors in 1972 white participation far outnumbers the black student rates in honorary clubs. Still, for 1972 seniors, other activities of high visibility (such as student government) or academic content (such as subject matter clubs and hobby clubs) there was no evidence of white

dominance nor reason to believe that racial stereotypes are at work. For 1980 sophomores, patterns suggesting racial stereotypes were not apparent.

Overall, extracurricular activities appear to be an important source of cross-race contact in desegregated high schools, although attention should be given to ensuring that clubs and activities do not become matters of racial turf or identification within desegregated schools--a potential most apparent in athletics, music or drama, and academic honorary clubs.

Student academic course assignments within desegregated schools

1. For seniors in 1972, course assignments and tracking or ability grouping significantly reduce the potential for cross-race contact in the classrooms of racially mixed schools.

2. For certain courses that are taken most often by students from academic college preparatory programs, such as math or science, there is a large reduction in the potential for cross-race contact because black students are underrepresented as seniors in such courses, and an additional reduction occurs when tracking or ability grouping is used.

3. For courses that are taken by most students in the school regardless of their program assignment, when tracking or ability grouping is used, the potential for cross-race contact across programs is nearly eliminated and the potential for cross-race contact is significantly reduced among the students who are enrolled in such courses.

The general impression generated from these descriptive data is that activities from which students in desegregated schools can derive peer group status offer more potential for cross-race contact than do activities from which students might derive adult status recognition.

Extracurricular activities, curriculum placement and grades as correlates of students' sense of well-being, efficacy feelings and self-esteem.

1. Black and white students who participate in extracurricular activities experience an enhancement of their sense of well-being. Such participation is relatively trivial though positive in its impact on students' sense of efficacy or self-esteem.

2. Student involvement as measured by extracurricular activities and curriculum placement and student performance as measured by grades are more important than non-school factors like race, sex and region as determinants of their sense of well-being, efficacy feelings and self-esteem.

3. Student performance in school is by far the most stable and important factor contributing to each of the outcomes examined here.

4. Black students in desegregated schools experience a substantial enhancement to their general social-psychological state as a result of their participation in extracurricular activities.

5. Being black and/or being male is independently negative in its impact on students' efficacy feelings and being black has a persistent effect even controlling for other school and non-school factors.

These results suggest a clear need for schools to carefully plan and design the organization of the school program with special attention given to equity in access to both the academic and non-academic offerings of the school. Such access will pay dividends in individual student development and at the same time increase the potential for productive cross-race contacts and hence improve social development.

Our findings also implicate the notions of a youth culture whose values are counter-productive to academic goals. We have argued that curriculum

placement is one of the earliest messages students receive about their likely adult status. Thus, both objectively and subjectively these placements are a measure of status differentiation. This may be one implicit factor contributing to the underrepresentation of black 1972 seniors in the higher academic courses. That is, if such courses were not an important status and mobility resource, would the underrepresentation be as great? More clear, however, is the observed effect of grades in school on these non-academic outcomes. Students clearly operate with an understanding that adult evaluated performance is most important to their growth through adolescence into adulthood. The concern raised by this finding is that while it is desirable to instill achievement orientation values in youths, such values perhaps should not be as critical to so many dimensions of young peoples' sense of self-worth.

Introduction

Although a high school may enroll a racially or ethnically mixed student body, the chances that students will actually experience a successful desegregated education depends upon important internal conditions within the school. Cross-group contact will be limited if students from different racial/ethnic groups are resegregated into separate classes and activities in the school. In addition, if one racial group is excluded from the higher status courses and activities, a school's climate of egalitarianism and fairness may be threatened, which can diminish the quality of the cross-group contacts that do occur.

This paper examines two important features of the internal organization of high schools: (1) academic program and course enrollments and (2) extracurricular memberships. The goal is to describe the extent of student resegregation within racially and ethnically mixed high schools, to assess the seriousness of within-school resegregation, and to discuss some implications for improved practice.

First, we will put the problem of within-school segregation into perspective by reviewing previous evidence that compares different sources of racially isolated education in this country. Then we will present new tabulations from a national survey of high school students to see how the course and activity participation rates differ for students in desegregated and single-race schools, and to describe how participation rates differ between black and white students attending the same desegregated high schools. Finally, we will discuss some

implications of these results for achieving the successful internal integration of racially mixed high schools.

Between-school and Within-school Sources of Racially Isolated Education

Previous research has shown that, while resegregation of classrooms within desegregated schools is a significant problem, racially segregated education in this nation is primarily due to segregated schools and secondarily due to segregated classes within desegregated schools (Morgan and McPartland, 1980). The problem of arranging for desegregated school assignments within districts and metropolitan areas remains by far the greatest impediment to racially mixed education. Solving problems of resegregated classrooms would not make as much overall difference as would significantly increasing the number of desegregated schools, even though some classroom resegregation would be expected to occur.

This conclusion is based on analyses of the 1976 Office of Civil Rights (DHEW) survey of public school districts that collected nationwide data from individual schools on the racial and ethnic enrollments at both the school and classroom levels. This research showed that indices for school segregation are much larger than comparable measures for classroom segregation within racially mixed schools, and that few students within desegregated schools are concentrated in classes with members of their own racial group only, even though some may be in classes with fewer members of other racial groups than would be expected by chance. In other words, although desegregated schools often miss available opportunities for more egalitarian student contacts across racial lines, almost all students attending a racially mixed school will regularly experience contact in racially mixed classes. But, this

generalization is less true for secondary than elementary schools.

Figure 1, drawn from this previous research, provides some perspective on the problem of resegregation within racially mixed schools. Comparisons are shown between educational levels for different geographic regions on an index of classroom segregation. The classroom segregation index[1] measures how far the actual classroom allocations of black and white students depart from a random classroom distribution of the available students. This measure can range from a value of zero for completely random assignment of students to a value of 100 for complete separation of black and white students into single race classrooms. The same index used to describe classroom segregation within racially mixed schools has also been used in published reports on the extent of school segregation within racially mixed districts and localities. Because this index is mathematically independent of the overall racial proportions in a school or locality and of the size of the school or locality, it can be used to make direct comparisons of the extent of school and classroom segregation.

Figure 1 shows that classroom resegregation within racially mixed schools is a more serious problem in secondary schools than in elementary schools. In every region, high schools have more internal classroom segregation than middle or junior high schools, and elementary schools have noticeably less internal segregation than the two higher school levels. But when these classroom segregation index values are compared to published school segregation indices, the problem of school segregation appears to be many times more serious.

The segregation of schools within districts across the nation was reported to be .30 in 1976 for elementary and secondary schools combined

(U.S. Commission on Civil Rights, 1979, Table 1), and to be .45 for elementary schools and .27 for secondary schools in 1972 (Coleman, et al., 1975, Table 9). Consequently, the national segregation index value for secondary school segregation was more than twice as large as the .05 and .07 classroom segregation index values shown in Figure 1 for high and middle schools, and the national value for elementary school segregation is more than eight times the size of the classroom segregation index value shown in Figure 1 to be .056 for elementary schools. Thus, the major source of racially isolated education is at the school assignment level rather than the classroom assignment level. Even if within-school resegregation continued at present rates, the major progress in creating racially mixed educational environments depends upon policies directed at reducing segregated school enrollments within districts and localities. The policy emphasis on the school level is especially true for elementary schools, where classroom segregation within schools is lowest and school segregation within localities is highest.

Race Differences of Student Participation in High School Courses and Activities

High schools may be a particularly difficult educational level at which to deal with the problems of resegregation within desegregated schools. But, at the same time, the high schools offer opportunities for positive student contact that do not exist at earlier levels of schooling. The problems are different in the high school because of the size and heterogeneity of the typical high school population and the special needs and interests of an older student population. Still, because of the existence of a diversity of possible course contents and extracurricular activities in high school, there are many potential opportunities to locate common student interests

and recruit racially mixed memberships that can serve to internally integrate a desegregated student body. For example, recent research (Patchen, 1981) reports that both black and white students who were active in the same extracurricular activities were more likely to report other-race friendships. To gain a better appreciation for the problems and opportunities for within-school organizational approaches at the high school level, it is necessary to investigate the black and white student participation rates in specific courses and activities.

National survey data were collected in 1972 by the National Center for Education Statistics that permit more detailed investigations of participation patterns in courses and activities. In the National Longitudinal Survey of the High School Class of 1972 (NLS), random samples of 20 students were drawn from 1318 schools throughout the nation, who reported on their participation in nine categories of extracurricular activities, and for whom their enrollment in four major academic course areas was recorded according to the track or ability group level of the student's class. Tabulations will be reported of participation rates by different race and sex subgroups of students in Northern and Southern high schools.

Using these tabulations, comparisons will be made of the participation rates of students in segregated (single race) and desegregated schools, to examine whether opportunities are available and used in desegregated schools to capitalize on the interests of black and white students. Second, comparisons will be made of the participation rates of black and white students attending the same desegregated high schools to investigate where the greatest opportunities for cross-racial contact exist and whether there are patterns of over- or under-representation that suggest status distinctions within racially mixed enrollments.

Extracurricular memberships

The NLS survey requested students to report their level of participation in the following nine categories of extracurricular clubs and activities:

1. Athletic teams, intramurals, letterman's club, sports club
2. Cheerleaders, pep club, majorettes
3. Debating, drama, band, chorus
4. Hobby clubs such as photography, model building, hot rod, electronics, crafts
5. Honorary clubs such as Beta Club or National Honor Society
6. School newspaper, magazine, yearbook, annual
7. School subject matter clubs such as science, history, language, business, art
8. Student council, student government, political club
9. Vocational education clubs such as Future Homemakers, Teachers, Farmers of America, DECA, OEA, FBLA, or VICA

The percent of students participating in these activities was calculated in each school separately for black males, white males, black females and white females. Table 1 reports the average percentage of student participation for segregated and desegregated high schools.[2] (Segregated high schools for black students have no white enrollment reported by the principal, and segregated schools for white students have 100 percent white enrollment reported by the principal.)

The comparison between the participation rates of students in segregated and desegregated high schools identifies some race and sex differences in the degree to which students find and use the same opportunities in desegregated schools that would be expected from the participation rates reported in segregated schools for the comparable race and sex group.

Table 1 shows that white students of both sexes do <u>not</u> generally participate in activities and clubs to the same extent in desegregated high schools as they do in segregated ones. On the other hand, black male students generally

participate more in the activities and clubs offered in desegregated high schools. Black females show a mixed pattern of comparative participation rates in segregated and desegregated schools, with little consistency across the regions in the signs of the differences for specific activities.

Table 1 also shows specific activities in which the pattern, size and consistency of racial over- or underrepresentation differences in desegregated schools is most striking. Athletic activities in desegregated high schools draw a much higher rate of black participation and a much lower rate of white participation for both males and females, compared to the participation rates in segregated high schools. Drama and music activities show the same comparative patterns as athletic activities, but the differences are usually smaller. For other categories of extracurricular activities, there is no pattern of differential rates of participation in desegregated high schools that favors one racial group and is consistent over both regions and sexes.

Thus, it appears that white students are more reluctant to join extracurricular activities in desegregated schools than would otherwise be expected, while black students (especially males) are equally or more active in clubs and activities in the desegregated settings. The differential rates are particularly evident for the two largest categories of extracurricular activities: athletics and drama or music.

Although these contrasts may find their source in the family background differences of students attending segregated and desegregated high schools or in the number of activity offerings made available in the different schools, it is useful to consider that the climate of desegregated schools has something to do with it. Are there better ways of providing extra-

curricular activities in desegregated high schools to more fully capitalize on the interests of white students (who appear to be less active than would be expected) without depressing the participation rates of black students?

Table 2 presents statistics to directly investigate the degree and nature of resegregation of extracurricular activities within desegregated high schools. This table examines the participation rates of black and white students attending the same desegregated high schools.[3] Statistics are presented for Southern males, Northern males, Southern females, and Northern females.

The average participation rates of black students in these schools is shown (B% in Table 2) as well as the average participation rates of white students in the same schools (W% in Table 2). To show which activities provide the greatest opportunity for cross-racial contact in desegregated schools, an index is constructed that estimates the probability that a random black or white student in a racially balanced school would encounter a student of the opposite race in a particular activity (B & W in Table 2). This index is a function of the observed black and white participation rates, and is calculated under the assumption that the school as a whole enrolls equal numbers of black and white students.[4] The values can vary from 0 to .5, where .5 is the probability that a black student would encounter a white (or equivalently that a white student would encounter a black) in an activity where all black and all white students in the school were members. The index will assume higher values (up to .5) to the extent that the activity attracts a large membership from the study body and that the representation is balanced between blacks and whites. Finally, a measure of the over- or under-representation of blacks or whites in each activity is provided as the ratio of black to white participation rates (B ÷ W in Table 2).

Table 2 shows that there is widespread participation of high school students in extracurricular clubs and activities, but the over- or under-representation of the racial groups is considerable in many activities and significantly reduces the potential for cross-race contact in desegregated high schools.

Blacks participate more than whites in most clubs and activities in desegregated high schools, with the major exception of honorary clubs where blacks are only half to two-thirds as likely as whites to be members. The ratio of black to white participation rates (B ÷ W) shows black student overrepresentation to be especially evident in athletics and drama or music activities. Other incidences of high black overrepresentation include females in hobby clubs and males in subject clubs, Northern males and females in student government, and Northern females as cheerleaders. Other exceptions to the black overrepresentation are student newspapers for all except Southern males.

The index used in Table 2 to rank activities according to their probabilities for cross-race contact (B & W) indicates that, for males, athletics stands out as providing most opportunity. For females, drama or music, subject clubs, and athletics are higher than any other activities in creating cross-race contact in desegregated schools. Nevertheless, these probabilities could be significantly increased if white student participation would rise to the same level as black student participation. For example, an increase in white participation rates in athletics to the observed black student level would have the effect of increasing the probabilities for cross-racial contact in a racially balanced high school from .294 to .343, .298 to .354, .162 to .198 and .168 to .233 for the different sex and region groups.

Academic course enrollment

The NLS survey also collected information from the official school records on individual student enrollment in academic programs, courses, and tracks. Information was recorded on (1) whether a student's course of study was academic or college preparatory, general, or vocational-technical; (2) whether the student took courses during the senior year in science or math, English or language, social studies, or vocational-technical or job-training; and (3) if the student took courses in the above areas, in which ability group or track was the student placed.

Comparisons of average student enrollment rates are presented in the same form as the previous tabulations of extracurricular memberships, to contrast segregated with desegregated schools and black with white students in the same desegregated high schools.

Although whites are significantly more likely than blacks to be in an academic or college preparatory program regardless of the region or racial composition of their schools, there are some differences between segregated and desegregated students. Table 3 shows that in the North, desegregated students of both races are more likely than segregated students to be enrolled in academic or college preparatory programs of studies. These program enrollment differences favoring desegregated students in the North are larger for black students than for white students. The differences also translate into comparable course enrollment differences for the desegregated students in the North, although the pattern is much clearer for white than black students. Northern desegregated white students are more likely to be enrolled in academic courses (such as science, math, English, language, and social studies) than their counterparts in all-white high schools. Northern black students

in desegregated high schools have higher rates of participation in academic or college preparatory programs mainly in science or math courses for males and females, and in social studies courses for females. The exceptions in course enrollments for Northern black students that do not differentially favor the desegregated students are in content areas which are less selective and enroll the vast majority of students in any case: English or language courses for males and females and social studies courses for males.

Although the segregation/desegregation differences in the North were consistent for program enrollments and less consistent for specific course enrollments, the opposite pattern exists in the South. There is no regular tendency for desegregated students to be enrolled at a higher rate in an academic or college preparatory program in this region. Nevertheless, southern white students of both sexes from desegregated schools are found more often in academic courses than their counterparts in all-white schools. This is the same pattern that was observed for whites in the North. On the other hand, black students in the South attending desegregated high schools are less likely to be enrolled in academic courses compared to black students in all-black schools.

As in earlier comparisons between segregated and desegregated students, these contrasts in enrollment rates could be due to either family background differences of students attending the separate schools, or to differences in the course offerings of the schools, or to differences in the climate or competitive standards that black and white students encounter in typical segregated or desegregated environments. It seems reasonable to suggest that the observed differences are due to the academic heterogeneity of students in typical desegregated high schools that often cuts along racial

lines. More black students than whites will be below the school average in prior academic preparation and performance in the desegregated situation, which becomes translated into the racial differences in program and course enrollments we observed.

Table 4 presents information with which to assess the problem of resegregation of academic courses within desegregated high schools. Here we contrast the course enrollment rates of black and white students in the same desegregated schools, using the same statistical measures for comparisons that were calculated earlier in Table 2 for extracurricular activities. Table 3 also adds information on the track or ability group placement of students, as well as program and course enrollment reports.

Table 4 shows clearly that black students in desegregated schools are less often in academic or college preparatory programs and more often concentrated in the less selective courses, compared to the white student distributions in these schools. The racial differences in program assignments are not nearly as large as the differences in selectivity of course assignments. We see in Table 4 that the ratio of black to white enrollment in academic or college preparatory programs (B ÷ W) is approximately 0.90 for each sex and region. This means that a black student's chances of being enrolled in such programs are about 90 percent of white students' chances in desegregated schools. The index of probabilities for cross-race contact in a racially balanced desegregated school (B & W) indicates that an average black or white student has a potential probability of from .35 to .40 of encountering a member of the other race as a fellow participant in academic or college preparatory programs. But this assumes that black and white students in this program are equally enrolled in the same course and ability groups within the academic or college preparatory

program. The remaining sections of Table 4 show that this potential for interracial contact is not even closely approximated because of the way course and ability group assignments are made.

Without considering tracking or ability grouping, Table 4 shows that black and white students are about equally likely to be enrolled in most courses in desegregated schools. With the exception of math or science courses for Southern males, the ratio of black to white enrollment rates is between .91 and 1.11, and close to an even 1.00 in most cases. Because more than three quarters of all seniors take English or language and social studies courses, the probability of cross-racial encounters in a racially balanced desegregated school would range from .379 to .446 (B & W in Table 4). Science or math, and vocational-technical courses, enroll a smaller fraction of seniors, so the nearly equal enrollment rates of blacks and whites would produce a less frequent chance of cross-racial contact in a racially balanced school, ranging from probabilities of .205 to .339 for different regions and sexes. But tracking or ability grouping, when used, greatly reduces these enrollment ratios and potentials for cross-racial contact.

Assignment of students to courses according to track or ability level is widespread throughout the nation. The NLS data indicate that 58 percent of senior students in English or language courses are assigned by track or ability group, while 43% of seniors in science or math courses and 40% of seniors in social studies courses are also assigned by track or ability group. Vocational-technical courses, which are taken by less than half of the students enrolled in the other subject areas, use tracking or ability grouping for only 14 percent of their seniors.[4] Table 4 shows how the use of tracking and ability grouping in desegregated high schools

serves to greatly reduce the potential for interracial contact in courses.

The lower three sets of figures in Table 4 present the black and white enrollments in the highest track or ability group of science or math, English or language, and social studies courses, in schools that use tracking.[6] Examining the ratio of enrollment rates, we see that black students are only about half as likely as whites to be in high track math or science classes, only about one third as likely to be in high track English or language classes, and from 30 to 55 percent as likely to be in the highest track of social studies courses. This is to be compared with the nearly equal enrollment ratios in these courses without considering the grouping patterns. When we compare the index to estimate the probability of cross-racial contact in the high track courses with the same index for these same courses on a school-wide basis, we get some idea of the effect of tracking and ability grouping in reducing the potential for interracial contact in desegregated schools.

Table 5 compares estimates of cross-race student contact in the major academic courses under three possible methods of assigning students to classes: random assignment of all students in the academic or college preparatory program, random assignment of all students enrolled in the particular subject area regardless of their program assignment, and assignment of students to classes organized by track level or ability group. The indices for the probability of cross-race contact are taken from Table 4, with the indices for tracked courses multiplied by a factor to estimate the probability of cross-race contact if all students presently enrolled in the subject area were assigned to classes that were as racially unbalanced as the highest track in the subject. (The multiplication factor is the ratio of the sum of the percentages of black and white students

enrolled in the subject area to the sum of the percentages of students enrolled in the highest track.) Table 5 also shows the percent reduction in the estimated probabilities for cross-race contact that result from course assignments that differ from program enrollments, and from track assignments that differ from course enrollments.

In math or science courses, Table 5 shows a sizeable reduction in the probabilities for cross-race contact due to course assignments within program, and track assignments within course. But, except for Northern males, the reduction due to course assignments is much greater than the reduction due to tracking. That is, the probabilities of cross-race contact in math or science courses are reduced primarily because many fewer blacks than whites in college preparatory programs enroll in such courses, and secondarily because tracking or ability grouping is used for students enrolled in such courses. The reduction due to course assignments is estimated to be from 16.1 percent to 35.3 percent, while the reduction due to tracking is estimated to be from 8.9 to 15.1 percent.

English or language and social studies courses differ from math or science courses because most students take these courses regardless of their program. Not only do academic or college preparatory students take English and social studies, but so do many students from the general program and the vocational-technical program. In other words, there is a higher senior enrollment rate for both racial groups in English and social studies courses than in the academic or college preparatory program as a whole. Consequently, there is a greater potential probability for cross-race contact if class assignments to English and social studies classes were made randomly, without regard to a student's program assignment, than if random class assignments were made that did not permit students from one program

to enroll with students from a different program. Table 5 indicates this potential, but also shows that tracking or ability grouping significantly reduces the probabilities for cross-race contact below either potential.

Table 5 shows that the potential for cross-race contact would be between 9.6 and 26.7 percent greater for cross-race contact if English or language courses were randomly assigned without regard to program, compared to the potential if only academic or college preparatory students took these courses. The analogous figures for social studies courses are an increase of 1.8 to 24.1 percent. But in actuality, Table 5 shows that tracking and ability grouping reduces the potential for cross-race contact by 15.1 to 27.8 percent in English, and by 8.0 to 29.6 percent in social studies, compared to what would be expected if students in these courses were randomly assigned to classes without tracking. Moreover, the net effect of tracking is to offset the potential of student course enrollments that cut across program assignments, by reducing the probabilities for cross-race contact below the expected level if all college-preparatory students were assigned randomly to courses. The one exception is Northern females, where tracking does not eliminate the potential advantages of course assignments across programs, and there remains a higher probability for cross-race contact in tracked English and social studies classes than within the college-preparatory program as a whole.

Discussion

The preceding analyses suggest both some of the difficulties and potentialities of internally integrating a racially-mixed high school.

We are reminded that the problems of resegregation of course enrollments within desegregated schools are much more severe at the secondary school level than at the elementary school level. This is to some extent

an inevitable consequence of the greater differentiation of student interests and the greater heterogeneity of student academic accomplishments at older ages, coupled with the greater size of secondary schools that permits the creation of specialized programs, courses, and classes containing students of similar interests and traits. Under these circumstances, the importance is highlighted in secondary schools of those activities and courses where observed racial differences in student traits are not so large or salient. Specifically, core courses and extracurricular activities are highlighted as vital potential sources for internally integrating the desegregated high school.

In terms of extracurricular opportunities, we find that the high participation rate of students in high school clubs and activities creates a major potential for cross-race contact. But there are forces at work that somewhat reduce these possibilities, and which may reinforce status distinctions and racial differences within desegregated schools. Initially we observe that white students participate less in activities in desegregated schools than in all-white schools, while black students participate more in desegregated schools than in all-black schools. Actually, these general tendencies at their present level may be more advantageous for cross-race contact than the opposite racial differences would be, due to the typical racial enrollments in desegregated high schools. Most racially-mixed high schools are more than fifty percent white, so higher participation rates of black students could mean a net increase in the number of students experiencing cross-race contacts because a higher percent of black than white students need to participate to guarantee some representation of both racial groups in each club or activity. Nevertheless, the pattern of racial differences in participation rates within desegregated schools suggests

distinctions that reinforce status or racial differences.

We observe in desegregated high schools that higher black participation rates are most striking for athletics and music or drama, and that white participation far outnumber the black student rates in honorary clubs. Still, in other activities of high visibility (such as student government) or academic content (such as subject matter clubs and hobby clubs) there is no evidence of white dominance nor reason to believe that racial stereotypes are at work. Overall, extracurricular activities appear to be an important source of cross-race contact in desegregated high schools, although attention should be given to ensuring that clubs and activities do not become matters of racial turf or identification within desegregated schools--a potential most apparent in athletics, music or drama, and academic honorary clubs. Finally, because these analyses were restricted to high schools, the question remains about the role of extracurricular activities in middle and junior high schools. In these schools, classroom resegregation of courses may be almost as serious as in high schools, but clubs and activities may not be available to the same degree to create replacement opportunities.

In terms of student academic course assignments within desegregated schools, we observed that course assignments and tracking or ability grouping can significantly reduce the potential for cross-race contact in the classrooms of racially mixed schools. For certain courses that are taken most often by students from academic college preparatory programs, such as math or science, there is a large reduction in the potential for cross-race contact because black students are underrepresented as seniors in such courses, and an additional reduction occurs when tracking or ability grouping is used. For those courses that are taken by most students in

the school regardless of their program assignment, when tracking or ability grouping is used, the potential for cross-race contact across programs is nearly eliminated and the potential for cross-race contact is significantly reduced among the students who are enrolled in such courses.

To better capitalize on the potential for cross-race contact in the classrooms within desegregated schools, alternative ways of dealing with student heterogeneity are needed that will not create the classroom resegregation that frequently occurs. In core courses required of most students, such as English and social studies, there must be overriding instructional reasons in a school to justify extensive tracking, not simply reasons of administrative convenience such as block scheduling. Since many desegregated high schools are able to organize core courses without extensive tracking or ability grouping (we find only 40 percent of desegregated students are in schools reporting the use of tracking in senior English and only 45 percent in senior social studies), there is reason to believe current ability grouping is more extensive than necessary. Secondary schools should learn to make better use of instructional techniques for dealing with student academic heterogeneity that neither require ability grouping nor deprive students of academic rewards or motivation who are below the classroom average in academic performance. Currently, cooperative learning techniques such as Student Team Learning (Slavin, 1980) are available to give all students in an academically heterogeneous classroom a fair chance to earn academic rewards. And new methods of academic grading based on student progress are under development for these purposes.

For both extracurricular memberships and course enrollments, there is a need to find better ways to organize alternative electives to more effectively recruit students from the different race and sex subgroups. Greater

student choice within prescribed alternatives is a contemporary idea for improving the secondary school and reducing the alienation of high school students (Carnegie Council, 1981). Planning toward this end needs to carefully consider the internal impacts within desegregated schools. For example, the nearly equal participation rates of black and white students in subject matter clubs that we observed in desegregated high schools suggests that untapped content areas of common interest may exist for contact if properly organized within the racially mixed secondary school.

Descriptive research such as the present study is primarily useful as a statement of the problem of resegregation within the desegregated school. Field experiments are now needed to develop and assess specific methods of dealing with the student heterogeneity of the typical desegregated high school, methods which can minimize the need to separate blacks and whites into different classes or activities without reducing the academic motivation and attachments to school of either group.

Footnotes

(1) Classroom segregation index formula is

$$S = \frac{\text{(Percent white in the School)} - \text{(Percent white in the classroom of the average black student)}}{\text{(Percent white in the School)}}$$

$$\text{where percent white in the school} = \frac{\text{Number of White students in the school}}{\text{Total number of students in the school}}$$

$$\text{and} \quad \text{(Percent white in the classroom of the average black student)} = \frac{\sum_i \text{Number of blacks in classroom } i \times \text{Percent white in classroom } i}{\text{(Total number of blacks in all classrooms)}}$$

(2) The number of schools used in the calculation of average percentages in Table 1 are:

	South				North			
	BM	WM	BF	WF	BM	WM	BF	WF
SEG	25	21	25	21	16	86	18	84
DESEG	229	352	230	353	146	607	157	606

(3) The number of schools used in the calculation of average percentages in Table 2 are:

Southern Males = 210, Northern Males = 133,
Southern Females = 214, Northern Females = 144.

(4) The formula for the index is:

$$B \& W = \frac{1}{\frac{1}{B\%} + \frac{1}{W\%}}$$

(5) Tabulations from NLS User's Manual, Vol. 2.

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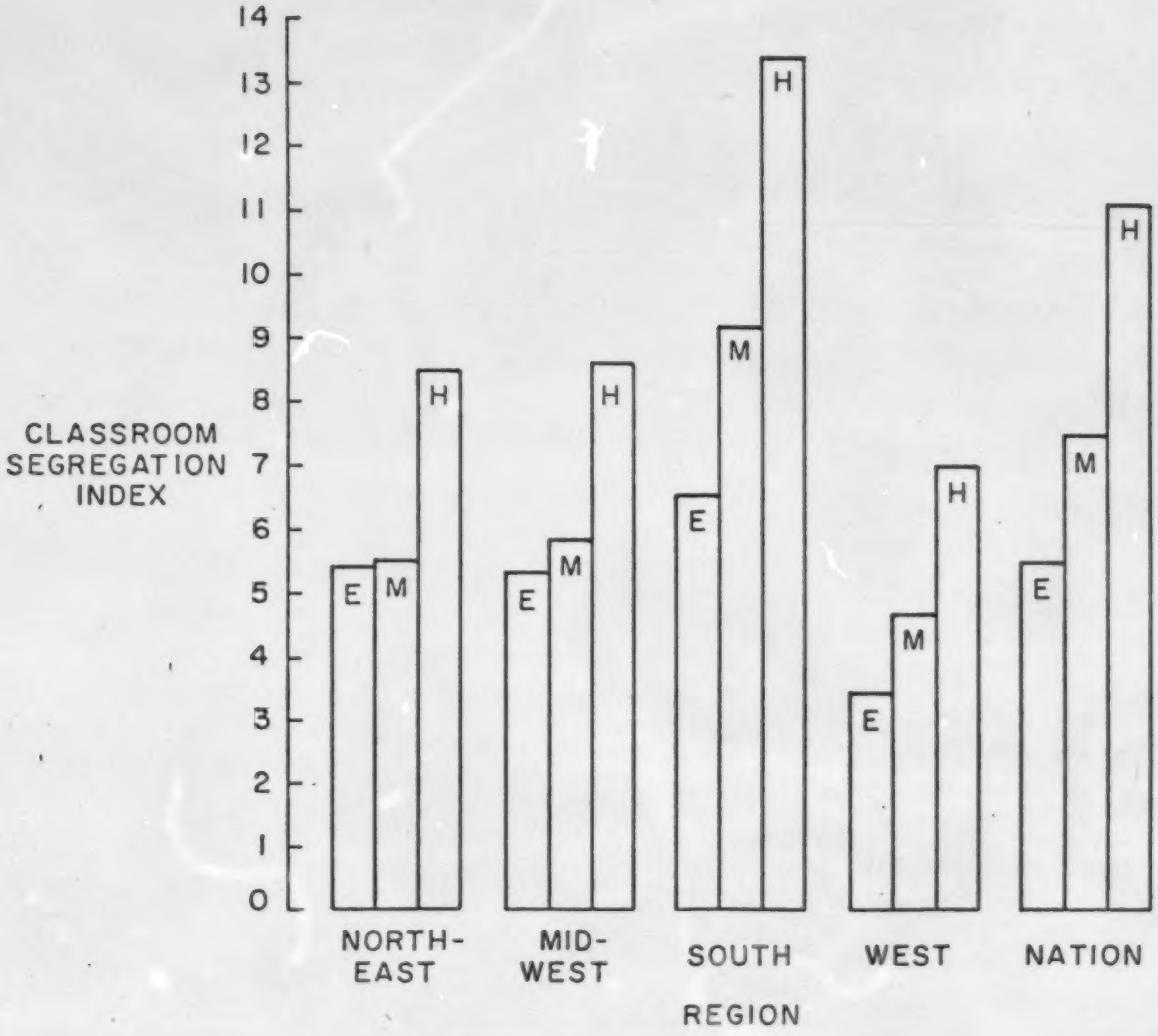
FIGURE 1
REGIONAL AND EDUCATIONAL LEVEL COMPARISONS
OF CLASSROOM SEGREGATION, 1976



E - Elementary Schools.
M - Middle or Junior High Schools
H - High Schools

Table 2

PARTICIPATION IN ACTIVITIES BY STUDENTS IN THE SAME DESEGREGATED HIGH SCHOOLS, BY RACE, SEX AND REGION

		Males		Females	
		South	North	South	North
Athletics	B%	68.7	70.8	39.5	46.6
	W%	51.6	51.5	27.6	26.4
	B & W	.294	.298	.162	.168
	B ÷ W	1.33	1.37	1.43	1.76
Cheerleaders	B%	10.3	3.9	29.7	36.3
	W%	7.3	2.6	30.8	19.0
	B & W	.043	.016	.196	.172
	B ÷ W	1.41	1.50	0.96	1.91
Drama, Music	B%	38.6	33.1	45.5	42.4
	W%	25.9	24.7	34.5	29.1
	B & W	.155	.141	.196	.172
	B ÷ W	1.49	1.34	1.32	1.46
Hobbies	B%	22.6	28.0	11.0	20.5
	W%	22.9	21.8	9.2	11.9
	B & W	.114	.122	.050	.075
	B ÷ W	0.99	1.28	1.32	1.72
Honorary	B%	11.0	5.6	14.4	9.8
	W%	15.9	11.3	25.5	19.4
	B & W	.065	.037	.092	.065
	B ÷ W	0.69	0.50	0.56	0.51
Newspaper	B%	22.3	14.3	23.1	22.4
	W%	15.6	18.5	30.8	24.8
	B & W	.092	.081	.132	.118
	B ÷ W	1.43	0.77	0.75	0.90
Subject Clubs	B%	34.7	24.8	39.8	28.7
	W%	24.4	18.0	37.2	27.2
	B & W	.143	.104	.192	.140
	B ÷ W	1.42	1.38	1.07	1.06
Student Govt.	B%	19.8	23.7	24.4	29.6
	W%	18.3	16.1	21.1	18.6
	B & W	.095	.096	.113	.114
	B ÷ W	1.08	1.47	1.16	1.59
Vocational Clubs	B%	37.0	10.8	57.2	16.9
	W%	33.0	7.9	49.4	18.5
	B & W	.175	.046	.172	.088
	B ÷ W	1.12	1.37	1.16	0.91

$$B \,\&\, W = \frac{1}{\frac{1}{B\%} + \frac{1}{W\%}}$$

Table 3

PERCENT PARTICIPATION IN ACADEMIC PROGRAMS AND COURSES BY RACE, SEX, REGION AND HIGH SCHOOL DESEGREGATION

	H.S. Composition	BM	WM	BF	WF
SOUTH					
Academic or College Prep.	SEG	67.2	82.9	78.3	67.9
	DESEG	74.8	84.0	67.8	73.2
	D-S	+7.6	-1.1	-10.5	+5.3
Science or Math. Courses	SEG	55.4	40.2	64.4	32.8
	DESEG	48.0	59.9	44.8	47.0
	D-S	-7.4	+19.7	-19.6	+14.2
English or Language Courses	SEG	96.6	72.5	95.9	70.3
	DESEG	87.1	88.2	87.2	88.1
	D-S	-9.5	+15.7	-8.7	+17.8
Social Studies Courses	SEG	87.0	53.8	88.1	48.7
	DESEG	77.3	75.1	75.8	76.1
	D-S	-9.7	+21.3	-12.3	+27.4
Vocational or Technical Courses	SEG	61.6	32.0	58.7	36.3
	DESEG	48.1	39.4	40.3	41.1
	D-S	-12.9	+7.4	-18.4	+4.8
NORTH					
Academic or College Prep.	SEG	65.6	86.3	61.3	72.9
	DESEG	75.5	84.6	66.8	74.8
	D-S	+9.9	+1.7	+5.5	+1.9
Science or Math. Courses	SEG	56.2	54.0	59.4	43.0
	DESEG	66.8	63.2	59.9	46.8
	D-S	+10.6	+9.2	+0.5	+3.8
English or Language Courses	SEG	98.3	77.7	91.4	78.6
	DESEG	89.5	85.4	90.5	84.8
	D-S	-8.8	+7.7	-0.9	+6.2
Social Studies Courses	SEG	94.8	81.3	76.2	80.7
	DESEG	86.4	85.0	89.1	83.0
	D-S	-8.4	+3.7	+12.9	+2.3
Vocational or Technical Courses	SEG	46.4	41.8	36.6	38.4
	DESEG	42.0	40.7	43.3	39.0
	D-S	-4.4	-1.1	+6.7	+0.6

Table 4

ENROLLMENT IN ACADEMIC PROGRAMS AND COURSES BY STUDENTS IN THE SAME DESEGREGATED HIGH SCHOOLS, BY RACE, SEX AND REGION

		Males		Females	
		South	North	South	North
Academic or Coll. Prep. Program	B%	75.3	77.2	67.3	66.5
	W%	83.7	85.0	72.2	74.9
	B & W	.396	.404	.348	.352
	B ÷ W	0.90	0.91	0.93	0.89
Science or Math Courses	B%	48.2	66.2	44.3	57.8
	W%	60.5	69.5	45.8	52.9
	B & W	.268	.339	.225	.276
	B ÷ W	0.80	0.95	0.97	1.09
English or Language Courses	B%	87.8	88.8	87.6	89.7
	W%	89.7	88.3	89.3	88.6
	B & W	.444	.443	.442	.446
	B ÷ W	0.98	1.00	0.98	1.01
Social Studies Courses	B%	78.4	85.8	76.1	88.7
	W%	77.3	88.1	75.4	86.2
	B & W	.389	.435	.379	.437
	B ÷ W	1.01	0.97	1.01	1.03
Voc. or Tech. Courses	B%	47.9	39.7	40.1	42.1
	W%	43.3	43.8	43.9	40.1
	B & W	.227	.208	.210	.205
	B ÷ W	1.11	0.91	0.91	1.05
Highest Track, Science or Math Courses	B%	18.0	16.9	20.7	20.2
	W%	34.9	37.6	46.6	41.6
	B & W	.119	.116	.143	.136
	B ÷ W	0.52	0.45	0.44	0.48
Highest Track, Eng. or Lang. Courses	B%	7.2	13.6	9.2	13.3
	W%	20.8	30.2	29.6	36.6
	B & W	.053	.093	.070	.098
	B ÷ W	0.35	0.45	0.31	0.36
Highest Track, Soc. Studies Courses	B%	9.2	11.0	16.0	19.2
	W%	25.0	36.0	34.8	34.7
	B & W	.067	.084	.110	.124
	B ÷ W	0.37	0.30	0.46	0.55

$$B \,\&\, W = \frac{1}{\frac{1}{B\%} \quad \frac{1}{W\%}}$$

Table 5

A COMPARISON OF ESTIMATED PROBABILITIES OF CROSS-RACE STUDENT CONTACT IN DESEGREGATED HIGH SCHOOLS, UNDER DIFFERENT COURSE ASSIGNMENT PRACTICES, BY SEX AND REGION

		Males		Females	
		South	North	South	North
Science or Math	Program B & W	.396	.404	.348	.352
	Course B & W	.268	.339	.225	.276
	Track B & W	.244	.288	.191	.242
	Percent reduction due to:				
	Course assignments (P-C/P)	32.3	16.1	35.3	21.6
	Track Assignments (C-T/C)	8.9	15.0	15.1	12.3
English or Language	Program B & W	.396	.404	.348	.352
	Course B & W	.444	.443	.442	.446
	Track B & W	.336	.376	.319	.343
	Percent reduction due to:				
	Course assignments (P-C/P)	-12.1	-9.6	-27.0	-26.7
	Track assignments (C-T/C)	24.3	15.1	27.8	23.1
Social Studies	Program B & W	.396	.404	.348	.352
	Course B & W	.389	.435	.379	.437
	Track B & W	.304	.306	.327	.402
	Percent reduction due to:				
	Course assignments (P-C/P)	-1.8	-7.7	-8.9	-24.1
	Track assignments (C-T/C)	21.8	29.6	13.7	8.0